PENDEKATAN ALGORITMA GENETIK UNTUK MASALAH TRANSPORTASI LINIER BIKRITERIA

SKRIPSI

YUNITA SETIAWATI

JURUSAN MATEMATIKA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
UNIVERSITAS AIRLANGGA
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LEMBAR PENGESAHAN SKRIPSI

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Penyusun : **YUNITA SETIAWATI**

NIM : **089911973**

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Disetujui Oleh :

Pembimbing I,	Pembimbing II,
Herry Suprajitno, S.Si, M.Si	**Rimuljo Hendradi, S.Si, M.Si**
NIP. 132 087 869	**NIP. 132 161 178**

Mengetahui :

Dekan Fakultas MIPA Universitas Airlangga	Ketua Jurusan Matematika FMIPA Universitas Airlangga
Drs. H. Abdul Latief Burhan, MS	**Drs. Moh. Imam Utoyo, M.Si**
NIP. 131 286 709	**NIP. 131 801 397**

Yunita Setiawati, 2004. *The Genetic Algorithm for Bicriteria Linear Transportation Problem*. This final paper was under guidance of Herry Suprajitno, S.Si, M.Si and Rimuljo Hendradi, S.Si, M.Si. Mathematics Department, Faculty of Mathematics and Natural Science, Airlangga University.

ABSTRACT

The bicriteria linear transportation problem (BLTP) is a modify of linear transportation problem. Transportation problem with a single objektive of minimizing the total cost is well known in the literature. BLTP is a transportation problem with two objectives : minimizing total cost and minimizing total deterioration.

This paper concern with BLTP and its solution utilising genetic algorihms (GA). Optimation concept of BLTP is optimal Pareto (nondominated solution). GA approaches for BLTP are to find the set of nondominated points in feasible area.

In this case used problem with 7 sources, 7 destinations, 20 population size, and 20 maximum generations. At last be obtained 15 nondominated solutions. It if compare with Goal Programming approach so 13 points are optimal solution and 2 points are suboptimal solution.

Key words: GA, BLTP, optimal Pareto solution.